UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
EMERGENCY RESPONSE BRANCH
9311 GROH ROAD, ROOM 216
GROSSE ILE, MI 48138-1697

SEP 16 2003

MEMORANDUM

REPLY TO ATTENTION OF:

SUBJECT: **ACTION MEMORANDUM** - Request to Conduct a Time-Critical Removal Action and for an Exemption from the $2 Million Statutory Limit at the Herron Avenue Drum Site, Cincinnati, Ohio (Site ID #B56V)

FROM: Steven L. Renninger, On-Scene Coordinator
Emergency Response Branch - Section 1

TO: William E. Muno, Director
Superfund Division

THRU: Richard C. Karl, Chief
Emergency Response Branch

I. PURPOSE

The purpose of this memorandum is to document your approval to expend up to $2,415,562 in order to mitigate a substantial threat to public health, welfare, and the environment at the Herron Avenue Drum Site, hereafter referred to as the Site, in Cincinnati, Ohio. Also, we request exemption from the $2 million dollar statutory limit. The Site once operated as a dump on the bank of the West Fork of Mill Creek during the 1970's where waste solvent drums, paint drums, solid waste, and foundry sand were deposited and subsequently buried. The proposed removal action is necessary to mitigate the immediate threat to public health and the environment posed by the presence of uncontrolled hazardous waste containing elevated levels of solvents including acetone, ethylbenzene, methyl ethyl ketone, toluene, and xylene in partially buried and subsurface waste drums. The response action proposed herein will mitigate the threats by removal and off-site disposal of the hazardous waste in partially buried and subsurface drums and contaminated soil. Additional activities will include Site security, perimeter air monitoring, and preparation of a Site emergency contingency plan. The proposed removal action is a time-critical removal due to Site conditions. The project will require an estimated 75 working days to complete. There are no nationally significant or precedent-setting issues associated with the Site and the Site is not on the National Priorities List (NPL).

II. SITE CONDITIONS AND BACKGROUND

A. Physical Location and Description

CERCLIS ID #OHN 000 508 879

The Herron Avenue Drum Site consists of approximately 4 acres of land that is in the process of being developed for residential housing in Hamilton County, Cincinnati, Ohio. The Site consists of twenty parcels located along the southern portion of Herron Avenue, and is bordered to the east by the West Fork of Mill Creek, to the west by Cass Avenue, and to the south by Dreman Avenue. The Herron Avenue Site is surrounded by an area of residential properties of the north, west, and south perimeters. The West Fork of Mill Creek and a public playground are located along the eastern perimeter.

The Site consists of an approximately 700 feet long (north-south) by 400 feet wide (east-west) area immediately west of the West Fork of Mill Creek, between Dreman Avenue and Powers Avenue. The Site includes private property that is being developed for residential housing and the City of Cincinnati right-of-way (a linear north-south tract 50 feet wide) in the central portion of the Site. Currently, the Site consists primarily of graded soil, partially completed sewer line, and tree cover, with piles of debris and construction material located throughout the Site.

In Ohio, the low income percentage is 30 and the minority percentage is 13. To meet the environmental justice (EJ) concern criteria, the area within 1 mile of the Herron Avenue Drum Site must have a population that is twice the state low income percentage and/or twice the state minority percentage. That is, the area must be at least 60% low income and/or 26% minority. At the Herron Avenue Drum Site, the low income percentage is 84% and the minority percentage is 96% as determined by the Landview III EJ analysis. Therefore, this Site does meet the region's EJ criteria based upon demographics as identified in "Region 5 Interim Guidelines for Identifying and Addressing a Potential EJ Case, June 1998."

B. Site Background - Historical Summary

Based on interviews and aerial photos (1932-2001), the northern portion of the Site was utilized for residential and agricultural purposes from the late 1880s to the1960s. From at least 1869 to 1905, the Site was owned by private individuals and utilized for residential and agricultural use. From 1905 to approximately 1948, the northern portion of the Site was owned by Not Responsive who reportedly utilized the land as a residence, and also to grow and sell vegetables. The northern portion of the Site was purchased by Not Responsive in 1963, and subsequently was transferred to the Revelson Realty Co. and Not Responsive until 1987. During this period of time, the northern portion of the Site appears vacant; however, separate oval cleared areas of unknown nature are apparent on 1986 and 1996 aerial photographs. On subsequent aerial photographs to 1986, the Site appears increasingly

wooded until the area was recently cleared for the proposed housing development.

The southern portion of the Site was utilized for residential and light industrial purposes, as well as a junkyard. A residential structure was present on the west side of Herron Avenue in the 1970s and 1980s. A wood working/cabinet shop was located in the southeastern corner of the southern portion of the Site along Dreman Avenue from approximately the 1930s to the 1960s. The southern portion of the Site was utilized as a junkyard from the 1970s to the early 1990s.

Based on topographic maps, the east-central portion of the Site increased in elevation from 1961 to 1975, likely as a result of fill material. Domestic and industrial waste were recently observed on the Site. The southeastern portion of the Site was also raised during the period from 1975 to 2001.

B. Site Background -1995 to 2003

Numerous environmental investigations were performed at the Site between 1995-2003. In the Report of Phase I Environmental Site Assessment by H.C. Nutting Company (HCN) dated October 31, 1995, the following potential environmental concerns were noted:

- Surface staining, apparently associated with petroleum products, in the northern portion of the property, and
- Hazardous substances or wastes associated with the former presence of a cabinet shop and enamel spraying shop on-site, and two 55-gallon drums observed on the property.

A limited Subsurface Investigation was performed by HCN at the Site in December 1995, and summarized in the Report of Limited Subsurface Investigation dated January 11, 1996. Eight shallow soil borings were taken on Site to depths of 4 to 8 feet below ground surface. Elevated levels of organic vapors were detected in samples from six of the eight borings during field screening. The HCN report concluded that localized hydrocarbon impact was present, and that the detected hydrocarbons did not appear to be those of environmental concern (i.e. attributable to the presence of gasoline, diesel fuel, or fuel oil).

In December 1999, Environmental Enterprises, Inc. (EEI), completed the Report of Phase I Environmental Site Assessment that identified the following areas of environmental concern:

- Four unlabeled 55-gallon drums were noted exposed in a hillside on Site. One of the drums appeared to contain asphalt; the other three drums were sealed and partially buried. The report recommended characterization of the drums prior to removal and disposal from the Site.

- Debris consisting of furniture, tires, bottles, and automotive parts were observed throughout the Site.

In a Phase II Investigation and Sample Results report dated May 18, 2000, EEI noted that samples were collected from the drums and laboratory analyzed for RCRA metals. Analytical results indicated the presence of lead in the drums (maximum concentration of 55 ppm) and recommended that the drums be disposed of properly as "lead contaminated".

In November 2002, South Cummingsville Community for Better Housing, Inc., purchased the Site for the purpose of developing 20 residential lots. The City of Cincinnati received an easement to install public storm sewers at the Site on October 24, 2002. Two 55-gallon drums with unknown contents (liquid/sludge) were encountered during excavation activities associated with the Herron Avenue sanitary sewer construction project on March 18, 2003. Variable fill materials consisting predominantly of foundry sands were encountered during sewer installation up to that date, as the sanitary line had already been installed north and south of the subsurface drum area (middle of the Site). Construction activities were halted with approximately 75 feet of sewer line remaining to be laid to finish the project.

A Geotechnical Exploration-Herron Heritage Homes Subdivision report dated April 30, 2003, discusses 14 soil borings at the Site taken by Thelen Associates, Inc., in conjunction with a geotechnical engineering evaluation of the area, relative to its planned redevelopment for residential purposes. The borings encountered fill materials to depths of 9.5-24.5 feet across the Site. The majority of the fill encountered consisted of "foundry spoils, silty fine sands", "some construction rubbish", and silty clay materials. "Petroleum odors" were noted from approximately 4 to 25 feet in a boring located in the east-central portion of the Site.

In a report dated July 2, 2003, ATC Associates, Inc., summarized a geophysical survey that was performed by subcontractor Mundell & Associates, Inc. (Mundell). The purpose of the survey was to investigate the extent of potential buried 55-gallon drums of waste at the Site, given the discovery of such materials within the sewer installation area. The report summarized that metallic anomalies at depth suggest the potential presence of significant buried drum repositories. Three distinct anomalies along the northern half of the right-of way area may represent repositories of over 100 drums each. Other irregularly shaped anomalies are less likely to, but could represent significant drum accumulations.

In a letter dated July 11, 2003, the City of Cincinnati requested U.S. EPA assistance in conducting a potential time-critical removal action at the Herron Avenue Drum Site. The

City of Cincinnati noted drums in various stages of deterioration were found along with what appeared to be paint, petroleum, solvent, and foundry sand waste.

B. Site Background -EPA Site Investigation

On July 1, 2003, U.S. EPA On-Scene Coordinator Steve Renninger, TTEMI START John Sherrard, the City of Cincinnati, and ATC (City of Cincinnati contractor) performed test trenching at four locations on the City of Cincinnati right-of-way portion of the Site. ATC identified the test trench locations based on the anomalies of the Mundell geophysical survey (Attachment 5). Three of four test trenching locations identified subsurface drums as the anomalies, the fourth location revealed tires as the anomaly. Foundry sand was encountered at all U.S. EPA test trench locations to a depth of 10-15' below ground surface. Subsurface drums were noted to be in a deteriorated condition with contents leaking to the surrounding soil and sand. Drum waste contents were noted as liquid solvent, paint, black tar, and debris.

U.S. EPA sample results of the foundry sand encountered in the test trenches indicated the presence of total lead at concentrations of 446 ppm, 361 ppm, 468 ppm, 190 ppm, and 14 ppm. Drum sample D-7 had a flashpoint of <46 degrees F and drum sample D-8 had a flashpoint of 77 degrees F, both considered ignitable waste streams. Drum sample D-7 contained acetone (14,000 ppm), ethylbenzene (21,000 ppm), methyl ethyl ketone (16,000 ppm), toluene (120,000 ppm), and xylenes (73,000 ppm). The concentration of methyl ethyl ketone (16,000 ppm) exceeded the TCLP regulatory limit of 200 ppm.

U.S. EPA Analytical Results

Herron Avenue Drum Site
Cincinnati, Hamilton County, Ohio

July 1, 2003

Parameter		Sample Identification	
		D-7	D-8
Labeling Information		None	None
PID field screening (ppm)		644	1,005
Drum description	Construction	Steel 55-gallon	Steel 55-gallon
	Volume	75%	75%

	Condition	Leaking	Deteriorated
Sample Matrix		Liquid	Solid
Parameter	Regulatory Limit		
TCLP VOC (mg/L):	—	NA	BDL
Total VOC (mg/L):			
Acetone	—	14,000	NA
Ethyl benzene	—	21,000	NA
Methyl ethyl ketone	200.0	**16,000**	NA
Toluene	—	120,000	NA
Xylenes	—	73,000	NA
Flash Point (°F):	< 140 °F	**< 46 °F**	**77 °F**

Key:

PID = Photo ionization Detector
VOCs = Volatile organic compounds
mg/l = milligrams per liter
< = Less than
> = Greater than
TCLP = Toxicity Characteristic Leachate Procedure
NA = Not analyzed
BDL = Below Detection Limit

III. THREATS TO PUBLIC HEALTH, WELFARE, OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES

The conditions at the Herron Avenue Drum Site present an imminent and substantial threat to the public health, or welfare, and the environment, and meet the criteria for a time-critical removal action provided for in the National Contingency Plan (NCP), Section 300.415, Paragraph (b)(2), 40 C.F.R. § 300.415(b)(2), specifically allows removal actions for:

1) **Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants;**

The Site is located in Cincinnati, Hamilton County, Ohio. The nearest body of water is the West Fork of Mill Creek, which is immediately adjacent to partially buried and subsurface drum areas. Mill Creek is a tributary to the Ohio River. On July 1, 2003, U.S. EPA OSC, Steve Renninger, and START conducted a Site investigation at the Herron Avenue Drum Site. During the investigation, the OSC noted unrestricted access to the drum disposal areas. A total of 35 partially-buried drums were identified in a 200' section of creek bank adjacent to the West Fork of Mill Creek. Drums were noted to be in varying stages of deterioration, with contents spilled at numerous locations (see Attachment 4 - Photo Log). A geophysical survey performed in 2003 indicated up to 20 subsurface anomaly areas, some as large as 900 square feet in size.
During the July 1, 2003, U.S. EPA Site investigation, partially-buried and subsurface waste drums were documented in various stages of deterioration with spilled contents. The hazardous substances, classified by 40 CFR 302.4, identified in deteriorated drums, included acetone, ethylbenzene, methyl ethyl ketone, toluene, and xylene. Exposure pathways include direct contact with drums, ingestion, and inhalation.

Methyl ethyl ketone can cause human health effects through inhalation, ingestion, and contact with the skin. Its health effects are similar to but more irritating than acetone. Its vapor is irritating to mucous membranes and conjunctiva. Exposure can irritate the eyes and nose, causing dizziness, fatigue, dermatitis, nausea, and vomiting. Prolonged exposure can cause central nervous system depression.

2) Hazardous substances or pollutants or contaminants in drums, barrels, tanks, or other bulk storage containers, that pose a threat of release;

During the July 1, 2003, U.S. EPA Site investigation, the OSC identified 35 partially buried waste drums on the bank of the West Fork of Mill Creek. Additionally, 16 subsurface waste drums were documented during test trenching. Abandoned waste drums were documented to contain hazardous waste and were in various stages of deterioration with spilled contents to the surrounding soil. Acetone, ethylbenzene, methyl ethyl ketone, toluene, and xylene, hazardous substances classified by 40 CFR 302.4, were identified in deteriorated waste drums. Methyl ethyl ketone was documented above the TCLP regulatory limit in a subsurface waste drum. Two drums with flash points of <46°F, and 77 °F are located within 200 feet of current residential areas. Drum disposal areas were observed to be accessible to the public.

3) High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate;

This factor is present at the Site due to the existence of partially-buried and subsurface

drums that have released their contents to the ground surface and the soil. The U.S. EPA Site investigation sampling documented methyl ethyl ketone concentrations above TCLP regulatory levels in deteriorated, subsurface drums that are located adjacent to the West Fork of Mill Creek and residential areas.

4) Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released;

Southwestern Ohio receives a substantial amount of precipitation during the spring and autumn seasons; winter temperatures are normally below freezing and snowfall occurs. The majority of the exposed 55-gallon drums observed during the U.S. EPA Site investigation and test trenching were in an advanced state of deterioration; the contents open to the environment. Weather conditions will continue to contribute to the deterioration of the drums over time. Any precipitation received by the Site freely infiltrates through the thin soil cover that exists over the waste areas. The precipitation then percolates through the waste and is assumed to leach into the aquifer or adjacent West Fork of Mill Creek.

5) Threat of fire or explosion;

The threat of fire or explosion exists at the site due to ignitable waste streams in partially-buried and subsurface hazardous waste drums. During the July 1, 2003, U.S. EPA Site investigation, the OSC observed partially-buried and subsurface drums in numerous test trench locations with flashpoints of <46 °F, and 77 °F (ignitable characteristic). A fire or explosion created from unstable flammable waste would cause migration to the West Fork of Mill Creek or adjacent residential areas and endanger emergency personnel responding to a fire or explosion.

IV. ENDANGERMENT DETERMINATION

Given the Site conditions, the nature of the confirmed hazardous substances, and the potential exposure pathways described in Sections II and III above, actual or threatened releases of hazardous substances from this Site, if not addressed by implementing the response actions selected in this Action Memorandum, present an imminent and substantial endangerment to public health, or welfare, or the environment.

V. EMERGENCY EXEMPTION FROM STATUTORY LIMITS

Section 104(c)(1) of CERCLA as amended by SARA, limits a Federal emergency response to $2 million unless three criteria are met. The quantities and levels of hazardous substances found at the Herron Avenue Drum Site warrant the $2 million exemption request based on the following factors:

1) There is an immediate risk to public health or welfare or the environment;

The Herron Avenue Drum Site is located in South Cummingsville, a suburb of Cincinnati, Ohio. The nearest body of water is the West Fork of Mill Creek, which is immediately adjacent to the drum disposal areas and flows into the Ohio River. The Site is bordered by residential properties along the north, south, and west perimeters. The Site is currently being developed for residential purposes.

A large number of subsurface hazardous drums and up to 5,000 cubic yards of volatile organic contaminated soil are located on the Site, which consists of a 4-acre parcel which is in the process of being developed for residential purposes. On July 1, 2003, U.S. EPA OSC, Steve Renninger, and START conducted a Site investigation at the Herron Avenue Drum Site. During the investigation, the OSC noted unrestricted access to the drum disposal areas. Partially-buried drums were identified in locations adjacent to the West Fork of Mill Creek and residential areas. Drums were noted to be in varying stages of deterioration, with contents spilled at numerous locations. In numerous locations, hazardous waste drums were exposed in the embankment above the West Fork of Mill Creek. A geophysical survey indicated up to 20 buried drum disposal areas to be approximately 25,000 square feet in total size, and within 200 feet of the surrounding residences. A total of 50 partially-buried and subsurface drums were identified during the Site investigation.

During the July 1, 2003, U.S. EPA Site investigation and test trenching, waste drums were documented to contain hazardous waste and were in various stages of deterioration with spilled contents. The hazardous substances, classified by 40 CFR 302.4, identified in deteriorated drums, included TCLP methyl ethyl ketone, and ignitable waste streams.

Methyl ethyl ketone can cause human health effects through inhalation, ingestion, and contact with the skin. Its health effects are similar to but more irritating than acetone. Its vapor is irritating to mucous membranes and conjunctiva. Exposure can irritate the eyes and nose; causing dizziness, fatigue, dermatitis, nausea, and vomiting. Prolonged exposure can cause central nervous system depression.

2) Continued response actions are immediately required to prevent, limit, or mitigate an emergency;

During the July 1, 2003, U.S. EPA Site investigation, the OSC observed buried drums in three Site locations with flashpoints of <46°F, and 77 °F (ignitable characteristic) as well as elevated levels (>TCLP) of methyl ethyl ketone. A fire or explosion created from unstable flammable waste would cause instant migration to the West Fork of Mill Creek and endanger surrounding residents and emergency personnel responding to a fire or explosion.

Additionally, the majority of the exposed 55-gallon drums observed during the U.S. EPA Site investigation and test trenching were in an advanced state of deterioration; the contents open to the environment. Weather conditions will continue to contribute to the deterioration of the drums over time. Any precipitation received by the Site freely infiltrates through the thin soil cover that exists over the waste areas. The precipitation then percolates through the waste and is assumed to leach into the shallow aquifer or adjacent West Fork of Mill Creek and Ohio River.

3) Assistance will not otherwise be provided on a timely basis.

In a letter dated July 11, 2003, the City of Cincinnati Assistant City Manager Timothy Riordan requested assistance from the U.S. EPA Region V, Emergency Response Branch to determine whether an immediate removal was warranted at the Herron Avenue Drum Site. The City of Cincinnati noted drums in various stages of deterioration were found along with what appeared to be paint, petroleum, solvent, and foundry sand waste. Additionally, the Ohio EPA does not have the resources to contain or remove the hazardous waste at the Site.

The removal response actions proposed below will mitigate threats with removal of approximately 5,000 cubic yards of source material including partially-buried, subsurface drums and contaminated soil. The removal response actions proposed below are appropriate and elimination of surface and subsurface hazardous waste streams will eliminate the need for post removal Site control. Furthermore, on-site stabilization of liquid and sludge waste streams for off-site disposal with contaminated soil is expected to provide substantial cost savings.

This removal response is expected to cost over $2 million. Therefore an exemption to the $2 million statutory limit is required.

VI. PROPOSED ACTIONS AND ESTIMATED COSTS

The OSC proposes that the following actions to mitigate threats posed by the presence of hazardous substances at the Herron Avenue Drum Site:

1) Develop and implement a Site Health and Safety plan, including an air monitoring plan and Site Emergency Contingency Plan;

2) Develop and implement a Site Security Plan;

3) Conduct a geophysical survey to determine extent of subsurface disposal;

4) Characterize, remove, and properly dispose of hazardous waste (uncontainerized waste, partially-buried and subsurface drums, and small containers) and associated heavily-contaminated soils and debris located at the Site in accordance with U.S. EPA's Off-Site Rule (40 CFR

§ 300.440);

5) Foundry sand will remain in place;

6) Develop and implement an extent of contamination and post excavation sampling plan to verify cleanup;

7) If necessary, backfill excavated areas with clean material and topsoil. Seed area to prevent soil erosion;

The removal action will be conducted in a manner not inconsistent with the NCP. The OSC has initiated planning for provision of post-removal Site control consistent with the provisions of Section 300.415(l) of the NCP. Elimination of all surface threats is, however, expected to minimize the need for post-removal Site control.

The detailed cleanup contractor cost is presented in Attachment 1 and estimated project costs are summarized below:

REMOVAL PROJECT CEILING ESTIMATE

EXTRAMURAL COSTS:

Regional Removal Allowance Costs:	
Total Cleanup Contractor Costs (This cost category includes estimates for ERRS, and subcontractors. Includes a 15% contingency.)	$1,912,968
Other Extramural Costs Not Funded from the Regional Allowance:	
Total START, including multiplier costs	$ 100,000
Subtotal, Extramural Costs	$2,012,968
Extramural Costs Contingency (20% of Subtotal, Extramural Costs)	$ 402,594
TOTAL, REMOVAL ACTION PROJECT CEILING	**$2,415,562**

The response actions described in this memorandum directly address the actual or threatened release at the Herron Avenue Drum Site of a hazardous substance, or of a pollutant, or of a contaminant which may pose an imminent and substantial endangerment to public health or welfare or to the environment. These response actions do not impose a burden on affected property disproportionate to the extent to which that property contributes to the conditions being addressed.

Applicable or Relevant and Appropriate Requirements

All applicable, relevant, and appropriate requirements (ARARs) will be complied with to the extent practicable. The OSC sent a letter to Jim Crawford of the Ohio EPA on July 25, 2003, requesting that Ohio EPA identify State ARARs.

All hazardous substances, pollutants or contaminants removed off Site pursuant to this removal action for treatment, storage, and disposal will be treated, stored, or disposed of at a facility in compliance, as determined by U.S. EPA, with the U.S. EPA Off-Site Rule, 40 CFR § 300.440.

VII. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN

Continued risk to public health and the environment will result if no action or delayed action ensues.

VIII. OUTSTANDING POLICY ISSUES

None.

IX. ENFORCEMENT

For administrative purposes, information concerning the enforcement strategy for this Site is contained in the Enforcement Confidential Addendum.

The total EPA costs for this removal action based on full-cost accounting practices that will be eligible for cost recovery are estimated to be $3,510,467.[1]

($2,415,562 + $50,000) + (42.38% x $2,465,562) = $3,510,467

[1]Direct Costs include direct extramural costs and direct intramural costs. Indirect costs are calculated based on an estimated indirect cost rate expressed as a percentage of site-specific direct costs, consistent with the full cost accounting methodology effective October 2, 2000. These estimates do not include pre-judgment interest, do not take into account other enforcement costs, including Department of Justice costs, and may be adjusted during the course of a removal action. The estimates are for illustrative purposes only and their use is not intended to create any rights for responsible parties. Neither the lack of a total cost estimate nor deviation of actual total costs from this estimate will affect the United States' right to cost recovery.

X. RECOMMENDATION

This decision document represents the selected removal action for the Herron Avenue Drum Site developed in accordance with CERCLA as amended, and is not inconsistent with the NCP. This decision was based upon information now presented in the Administrative Record for the Site. Conditions at the Herron Avenue Drum Site meet the NCP Section 300.415(b)(2) criteria for a removal and I recommend your approval of the removal action. The total project ceiling, if approved, will be $2,415,562. Of this, an estimated $2,315,562 may be used for cleanup contractor costs. You may indicate your decision by signing below:

APPROVE: _____ DATE: 9/16/03
Director, Superfund Division

DISAPPROVE: _____ DATE: _____
Director, Superfund Division

Enforcement Addendum
Attachments

1. Detailed Cleanup Contractor Cost Estimate
2. Administrative Record Index
3. Independent Government Cost Estimate
4. Photo Log
5. Site Geophysical Survey Map

cc: R. Worley, U.S. EPA, 5202-G
D. Henne, U.S. Department of the Interior, **w/o Enf. Addendum**
Chris Jones, Ohio EPA, **w/o Enf. Addendum**
Ohio Attorney General, **w/o Enf. Addendum**

ENFORCEMENT ADDENDUM

HERRON AVENUE DRUM SITE
CINCINNATI, OHIO

AUGUST 2003

ENFORCEMENT CONFIDENTIAL
NOT SUBJECT TO DISCOVERY

(REDACTED 2 PAGES)

NOT RELEVANT TO THE SELECTION OF THE REMOVAL ACTION

ATTACHMENT 1

DETAILED CLEANUP CONTRACTOR ESTIMATE
HERRON AVENUE DRUM SITE
CINCINNATI, HAMILTON COUNTY, OHIO
AUGUST 2003

The estimated cleanup contractor costs necessary to complete the removal action at the Herron Avenue Drum Site are as follows:

Personnel & Equipment	$ 509,450
Materials & Misc	$ 326,000
Transportation and Disposal	$ 828,000
TOTAL	**$1,663,450**

ATTACHMENT 2

U.S. ENVIRONMENTAL PROTECTION AGENCY
REMOVAL ACTION

ADMINISTRATIVE RECORD
FOR
HERRON AVENUE DRUM SITE
CINCINNATI, HAMILTON COUNTY, OHIO

ORIGINAL
SEPTEMBER 8, 2003

NO.	DATE	AUTHOR	RECIPIENT	TITLE/DESCRIPTION	PAGES
1	10/31/95	H.C. Nutting Company	Working in Neighborhoods, Inc.	Phase I Environmental Site Assessment for 16 Parcels at Herron and Dreman Avenues	18
2	01/11/96	H.C. Nutting Company	Working in Neighborhoods, Inc.	Limited Subsurface Investigation, Herron and Dreman Avenues	39
3	12/00/99	Environmental Enterprises, Inc.	Artetra Design, Inc.	Phase I Environmental Site Assessment of Property on Herron Avenue	63
4	05/18/00	Environmental Enterprises, Inc.	File	Phase II Environmental Site Assessment of Property on Herron Avenue (Incorporated by Reference)	
5	04/30/03	Mundell & Associates, Inc.	ATC Associates, Inc.	Geophysical Investigation Report for the Herron Avenue Site	6
6	06/04/03	ATC Associates, Inc.	City of Cincinnati	Preliminary Assessment for the Herron Avenue Site	81
7	07/11/03	Riordan, T., City of Cincinnati	Renninger, S., U.S. EPA	Letter re: City of Cincinnati's Request for U.S. EPA Assistance at the Herron Avenue Site	1
8	07/25/03	Renninger, S., U.S. EPA	Crawford, J., Ohio EPA	Letter re: U.S. EPA's Request that Ohio EPA Identify all State ARARs for the Herron Avenue Drum Site	2
9	08/18/03	Tetra Tech EM, Inc.	U.S. EPA	Site Investigation Report for the Herron Avenue Drum Site w/ Cover Letter	62

NO.	DATE	AUTHOR	RECIPIENT	TITLE/DESCRIPTION	PAGES
10	00/00/00	Renninger, S., U.S. EPA	Muno, W., U.S. EPA	Action Memorandum: Request for a Time Critical Removal Action at the Herron Avenue Drum Site **(PENDING)**	

ATTACHMENT 3

INDEPENDENT GOVERNMENT COST ESTIMATE

HERRON AVENUE DRUM SITE
CINCINNATI, OHIO

AUGUST 2003

(REDACTED 2 PAGES)

NOT RELEVANT TO THE SELECTION OF THE REMOVAL ACTION

ATTACHMENT 4

PHOTO LOG
HERRON AVENUE DRUM SITE

ATTACHMENT 5

SITE GEOPHYSICAL SURVEY MAP
HERRON AVENUE DRUM SITE